

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Ichiro OMURA et al.

SERIAL NO: New Divisional Application

GAU: Net Yet Assigned

FILED: Herewith

EXAMINER: Not Yet Assigned

FOR: POWER SEMICONDUCTOR SWITCHING ELEMENT

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references were submitted in parent Application Serial No. 09/892,545, filed June 28, 2001, where required, as were either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF:

Ichiro OMURA et al. : GROUP ART UNIT: Not Yet Assigned

SERIAL NO: New Divisional Application :

FILED: Herewith : EXAMINER: Not Yet Assigned

FOR: POWER :
SEMICONDUCTOR :
SWITCHING ELEMENT :

STATEMENT OF RELEVANCY

Commissioner of Patents
Washington, DC 20231

SIR:

Reference AA (U.S. Patent No. 4,754,310) on Form PTO-1449:

The first patent of the super junction structure.

Reference AB (U.S. Patent No. 5,637,898) on Form PTO-1449:

Trench MOS gate MOSFET. Deep trenches for both MOS gate and charge compensation.

Reference AO (2000-349288) on Form PTO-1449:

Deep trench for charge compensation with planar MOS gate is proposed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



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Form PTO 1449
(Modified)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY DOCKET NO.
248354US-2S DIVSERIAL NO.
New Divisional Application

LIST OF REFERENCES CITED BY APPLICANT

APPLICANT
Ichiro OMURA et al.FILING DATE
HerewithGROUP
Not Yet Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,754,310	Jun 1988	COE			
	AB	5,637,898	Jun 1997	BALIGA			
	AC	5,998,833	Dec 1999	BALIGA			
	AD	5,801,417	Sept 1998	TSANG et al.			
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AO	2000-349288	12/15/00	JAPAN		X
	AP	3-109775	05-1991	JAPAN		X
	AQ					
	AR					
	AS					
	AT					
	AU					
	AV					

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AW	Merchant, S., "Dependence of Breakdown Voltage on Drift Length and Buried Oxide Thickness of SOI RESURF LDMOS Transistors," <u>Institute of Electrical and Electronics Engineers</u> , 1993, pgs. 124-128.	
	AX		
	AY		
	AZ		<input type="checkbox"/> Additional References sheet(s) attached
Examiner			Date Considered

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.